

The Cypress Creek Watershed

Know Your Watershed

Cypress Creek is a tributary of the Blanco River in Hays County. The upper portion of the creek is ephemeral and dominated by undeveloped terrain. The lower portion contains a concentration of urban land as it passes through the towns of Woodcreek and Wimberley before meeting the Blanco River. Jacob's Well, an iconic artesian spring, provides Cypress Creek with the crystal-clear flows that many consider the lifeblood of the Wimberley Valley. The source of water for Jacob's Well is the Trinity aquifer, an underground reservoir that has been impacted by excessive pumping to support growth throughout the county. Flows from Jacob's Well will continue to diminish unless proactive steps are taken to preserve this invaluable resource.

WHY DOES CYPRESS CREEK NEED A WATERSHED PROTECTION PLAN?

- Population growth is increasing water consumption, which negatively affects aquifer recharge.
- Reduced groundwater affects water quality, limiting swimming and fishing.
- Wimberley Valley tourism depends on the health of Jacob's Well, Cypress Creek, and Blue Hole. If they cease to flow with clean & clear water, the local economy will dry up with the creek.
- Protecting the creek and watershed lessens impacts of droughts and floods.

WATERSHED FACTS:

DRAINAGE AREA:

38.3 sq miles / 24,486 acres

100-YR FLOODPLAIN AREA:

2.30 sq miles / 1472 acres

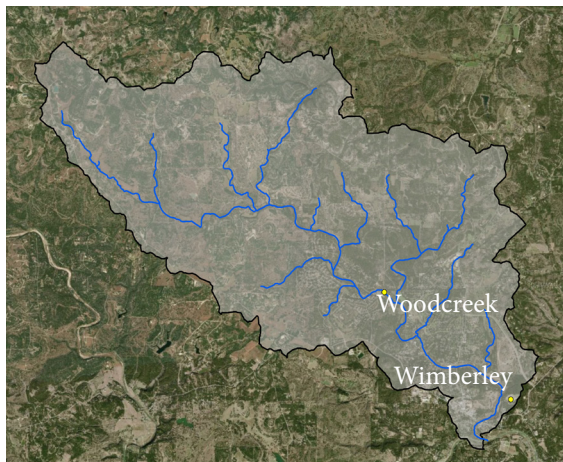
STREAM LENGTH: 15.7 miles

SOIL TYPES:

Bolar, Brackett, Comfort, and Doss

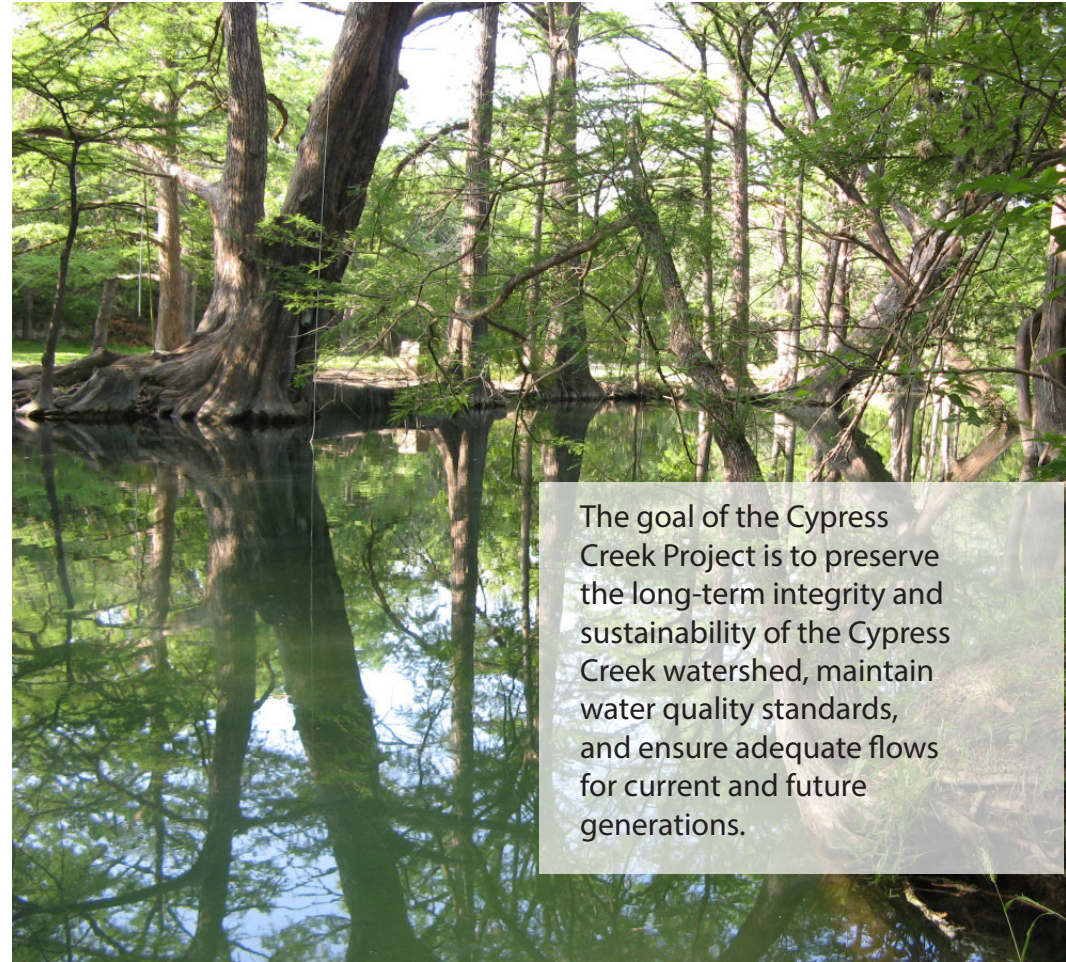
LAND COVER:

- 45% Mixed Forest
- 31% Shrub / Scrub
- 10% Evergreen Forest
- 10% Developed
- 6% Herbaceous



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Nonpoint Source Pollution Prevention RESOURCE GUIDE

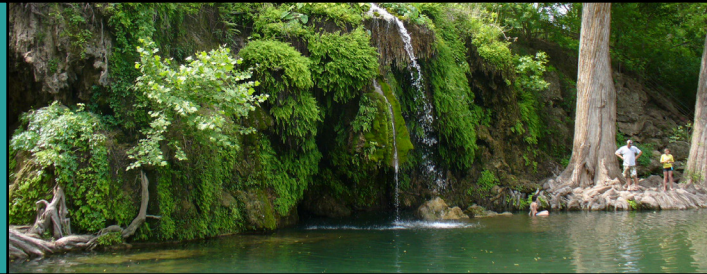


The goal of the Cypress Creek Project is to preserve the long-term integrity and sustainability of the Cypress Creek watershed, maintain water quality standards, and ensure adequate flows for current and future generations.



Let's keep it *clean*, *clear* & flowing

Funded in part through a grant from the U.S. Environmental Protection Agency through the Texas Commission on Environmental Quality.



Cypress Creek Watershed Protection Plan

This resource guide is part of the watershed protection plan; made available through the efforts and resources of the following stakeholders.



BMPs in the Cypress Creek Watershed

PERMEABLE PAVERS



Permeable pavers and porous concrete are pervious alternatives to standard concrete sidewalks, asphalt parking lots, and other impervious surfaces. Pervious surfaces allow water to run through them rather than moving rapidly across or collecting on top of it. Permeable pavers are installed with small gaps between the individual pavers, allowing for water to move through the paver's voids and into the underlying gravel and soil layers at a controlled rate.

WHERE CAN YOU FIND PERMEABLE PAVERS IN THE WIMBERLEY VALLEY?

- Blue Hole Regional Park (100 Blue Hole Lane, Wimberley, TX 78676) - ADA parking spots, trails, and sidewalks
- Downtown Wimberley (14015 Ranch Road 12, Wimberley, TX 78676)



BMPs in the Cypress Creek Watershed

RAIN GARDENS



Not only are rain gardens aesthetically pleasing, but they also filter pollutants that might reach the watershed via surface runoff. Rain gardens reduce runoff by intercepting and absorbing the water, as well as any pollutants present. Rain gardens protect the watershed by reducing flooding impacts and pollutants.

Where can you find rain gardens in the Wimberley Valley?

- Quicksand Golf Course at Woodcreek (1 Pro Ln, Wimberley, TX)
- Vegetated filter strips* at Wimberley Valley Watershed Association Headquarters (1405 Mt. Sharp Rd, Wimberley, TX)

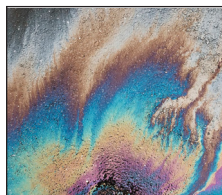
*Vegetated filter strips act in a similar manner as rain gardens, but are built up to stop excess stormwater, rather than being built into a depression like a rain garden.

What is Nonpoint Source Pollution?

Nonpoint source pollution (NPS) refers to pollution that originates from multiple sources across a large area of land, rather than a point source where the source of pollution is easily identifiable. Most NPS pollutants reach our local waterways via stormwater runoff, which occurs when water is unable to soak into the ground and runs over the ground (specifically impervious surfaces such as roads, parking lots, or sidewalks). Consequently, while moving over surfaces, the water will pick up pollutants and then eventually empty into a stream.

WHERE DOES NPS POLLUTION COME FROM?

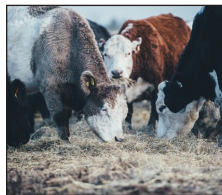
NPS Pollution can come from several different sources and varies depending on the land use in the surrounding areas.



Oils and grease from vehicles



Household hazardous waste items



Animal waste (livestock, domestic, wildlife)



Malfunctioning septic systems



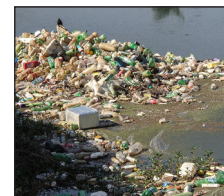
Pesticides and fertilizers



Sediments



Heavy metals



Trash and micro-litter



Cypress Creek Today

The Cypress Creek watershed is located within the heart of the Texas Hill Country. Cypress Creek is an important source of water for both residents and wildlife that reside in the area, and it provides flow to local recreational attractions such as Jacob's Well and Blue Hole Regional Park.

Growth in Hays County is expected to increase pressure on our water resources. The Cypress Creek Watershed Protection Plan addresses issues such as surface runoff and overusing our water sources through the implementation of best management practices (BMPs).

SOLUTIONS: BEST MANAGEMENT PRACTICES

Best management practices (BMPs) are structural, vegetative, or managerial practices used to treat, prevent or reduce water pollution. They are meant to slow down stormwater runoff and remove pollution before they enter our creeks, rivers, and lakes. There are various types of BMPs that target different types of stormwater runoff; agricultural, commercial and institutional, municipal, industrial, and wholesale. Because each type of runoff contains different pollutants, menus of BMPs are tailored for these different sectors' impacts.

BMPs in the Cypress Creek Watershed:

- Rainwater Harvesting Systems
- Rain gardens
- Permeable Pavement
- Vegetated filter strips

BMPs in the Cypress Creek Watershed prevent the following pollutants from entering the creek:

- **Total Suspended Solids (TSS):** the amount of solids that are not dissolved in the water; they can reduce overall clarity of water.
- **Nitrogen (N):** nitrogen in rivers and streams can typically be attributed to pesticides and fertilizers; an excess of nitrogen can cause algal blooms.
- **Phosphorus (P):** phosphorus is essential for healthy vegetation; an excess of phosphorus can also cause algal blooms.

BMPs in the Cypress Creek Watershed

There are eleven completed BMPs in the Cypress Creek Watershed, below are examples of the different types that have been completed:

RAINWATER HARVESTING SYSTEMS



Rainwater harvesting (RWH) is the collection of rainwater from a roof surface into a storage vessel for outdoor watering, or indoor uses. RWH systems protect the watershed by reducing demand on groundwater, reducing stormwater runoff, and reducing pollutants.

Where can you find rainwater harvesting systems in the Wimberley Valley?

- The Patsy Glenn Refuge (417 Mill Race Ln, Wimberley, TX)
- Blue Hole Regional Park (100 Blue Hole Lane, Wimberley, TX 78676)
- Wimberley Valley Watershed Association Headquarters (1405 Mt. Sharp Rd, Wimberley, TX, 78676)
- Hays County Precinct 3 (200 Stillwater Rd, Wimberley, TX 78676)
- Quicksand Golf Course at Woodcreek (1 Pro Ln, Woodcreek, TX 78676)